

Name: \_\_\_\_\_

## p1029: Combine Like Terms (v1)

### Example

Combine like terms.

$$-6x - 3x^2 - 9x - 8x^2 + 4 + 8x^2 + 2 + 6 - 7x + 7$$

### Answer

Combine the quadratic terms.

$$-3x^2 - 8x^2 + 8x^2 \equiv -3x^2$$

Combine the linear terms.

$$-6x - 9x - 7x \equiv -22x$$

Combine the constant terms.

$$4 + 2 + 6 + 7 \equiv 19$$

The final result:

$$-3x^2 - 22x + 19$$

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### Question 1

Combine like terms.

$$-x^2 + 5x - 5x + 7x^2 - 8 + x + 9 - 9x^2 - 6 - 7x^2$$

$$-10x^2 + x - 5$$

## Question 2

Combine like terms.

$$-2x - 4 - 3x^2 + 6x^2 + 3 + 8x^2 + 9 + 7x - 9x - 6x$$

$$11x^2 - 10x + 8$$

## Question 3

Combine like terms.

$$3x^2 + 7x^2 - 9x + 4 - 5x^2 - 4 + 8x - x - 3 + x^2$$

$$6x^2 - 2x - 3$$

## Question 4

Combine like terms.

$$5 - 4x^2 + 3x^2 - 6x^2 - 1 - 5 - 9x - 7x + 8x + 2x$$

$$-7x^2 - 6x - 1$$